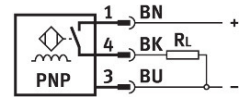


# Proximity sensor SIEF-M12NB-PS-S-L

Part number: 538311

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                      | Value                                                                                                |
|----------------------------------------------|------------------------------------------------------------------------------------------------------|
| Design                                       | Round                                                                                                |
| Conforms to standard                         | EN 60947-5-2                                                                                         |
| Symbol                                       | 00991701                                                                                             |
| Approval                                     | RCM trademark<br>c UL us listed (OL)                                                                 |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>To EU Low Voltage Directive<br>In accordance with EU RoHS Directive           |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions<br>To UK regulations for electrical equipment  |
| Measuring principle                          | Inductive                                                                                            |
| Rated operating distance                     | 8 mm                                                                                                 |
| Assured operating distance                   | 6.48 mm                                                                                              |
| Reduction factors                            | Aluminium = 1.0<br>Stainless steel St 18/8 = 1.0<br>Copper = 1.0<br>Brass = 1.0<br>Steel St 37 = 1.0 |
| Ambient temperature                          | -30 °C ... 85 °C                                                                                     |
| Repetition accuracy                          | 0.16 mm                                                                                              |
| Switching output                             | PNP                                                                                                  |
| Switching element function                   | N/O contact                                                                                          |
| Hysteresis                                   | 0.24 mm ... 1.2 mm                                                                                   |
| Max. switching frequency DC                  | 2000 Hz                                                                                              |
| Max. output current                          | 200 mA                                                                                               |
| Voltage drop                                 | ≤1.8 V                                                                                               |
| Short circuit current rating                 | Pulsed                                                                                               |
| Operational voltage range DC                 | 10 V ... 30 V                                                                                        |
| Residual ripple                              | 10 %                                                                                                 |
| No-load supply current                       | ≤15 mA                                                                                               |
| Reverse polarity protection                  | For all electrical connections                                                                       |
| Electrical connection                        | 3-pin<br>Fixcon<br>M12x1<br>Plugs                                                                    |
| Size                                         | M12                                                                                                  |
| Type of mounting                             | Via lock nut                                                                                         |
| Tightening torque                            | 10 Nm                                                                                                |

| Feature                                     | Value                                            |
|---------------------------------------------|--------------------------------------------------|
| Mounting type                               | Not flush                                        |
| Product weight                              | 22 g                                             |
| Material housing                            | PBT<br>Chrome-plated                             |
| Switching status indication                 | Yellow LED                                       |
| Degree of protection                        | IP67                                             |
| Immunity to magnetic fields                 | Magnetic direct and alternating field            |
| Corrosion resistance class CRC              | 2 - Moderate corrosion stress                    |
| Additional information for sensor selection | Reduction factor 1, resistant to magnetic fields |
| Electrical output                           | PNP                                              |
| Selection of sensor design                  | Standard                                         |